The Chain of Lakes Watershed Management Plan

By Lauren Dey Tip of the Mitt Watershed Council Watershed Management Coordinator

The Elk River Chain of Lakes is an important natural resource in Northern Michigan that warrants the utmost protection due to its ecological, recreational, and economic value. Despite efforts to protect the lakes, emerging issues, such as invasive species and general development pressures, threaten to impair these waters and degrade their ecological treasures.

What can be done about this? A watershed management plan is a tool used to protect our waters from nonpoint source pollution and other threats. It encourages sound science, communication, and partnerships; focuses on environmental results; and provides a means for cost effective management. An approved watershed management plan is required for watershed groups to be eligible to apply for Clean Water Act Section 319 (CWA 319) grants through the Department of Environment, Great Lakes, and Energy (EGLE), which support nonpoint source pollution mitigation.

In 2017, Tip of the Mitt Watershed Council began creating a watershed management plan for the Elk River Chain of Lakes watershed, which is now in final review with EGLE.

It's important to cover what a watershed is and why it needs a management plan. A watershed is an area of land that drains towards a receiving body of water. The receiving water body for the Chain of Lakes Watershed is every lake and stream in the entire Chain of Lakes, from Intermediate River to Elk River, including the Cedar River and Rapid River.

Activities that happen within watershed boundaries can result in point source and nonpoint source pollution. Point source pollution has a discrete source, typically a pipe from regulated industrial activity or from municipal wastewater treatment plants.

Nonpoint source pollution comes from a diffuse source and is mobilized by rain or snowmelt that runs over the land. Examples include pollutants from erosion, agricultural practices, leaky septic systems, pet waste, and automobile fluids. Nonpoint source pollution is not regulated. A watershed management plan is a tool used to protect and restore a water body from the effects of nonpoint



A Three Lakes Association greenbelt workshop at Lake Bellaire. Photo courtesy of Tip of the Mitt Watershed Council

source pollution.

The Chain of Lakes plan summarizes information about the water resources, land use, and water quality within the watershed. It also includes results of resource inventories that were conducted on road stream crossings, streambank erosion sites, shorelines, and forested and agricultural lands. This information was used to identify the types of threats and their sources, which helped us determine the critical areas for protection and priority areas for remediation.

Once this background information was collected and synthesized, implementation steps were developed in collaboration with the Watershed Center of Grand Traverse Bay and our other non-profit, lake association and municipal partners, such as Three Lakes Association (TLA).

The implementation priorities and tasks span 14 categories including road stream crossings, water quality, and shoreline protection. Each category lists individual projects that can be implemented, estimated costs, timelines, and partners.

Here's an example implementation step from the draft plan, listed as high priority: Implement best management practices (BMPs) on moderate and severe shoreline erosion sites on large inland lakes in conjunction with property owner outreach. Moderate and severe erosion sites are identified in the plan, and can be used to determine where these BMPs should be installed for maximum water quality benefits. This is a project that could be funded by EGLE's 319 program.

Once the Elk River Chain of Lakes Watershed Management Plan is approved any partners listed in the plan (including TLA) can apply for CWA 319 funds.

There are plenty of projects listed in the plan that would not be eligible for 319 funds because they do not relate to nonpoint source pollution (e.g. swimmers itch, invasive species). However, our watershed management plan is an excellent tool for seeking other funds for any of the projects listed because it demonstrates to funders that we have solid plans, reliable partnerships, and well-developed projects.

The final plan will be available on the Watershed Council's website: https://www.watershedcouncil.org/ If you have any questions please contact Lauren Dey, Watershed Management Coordinator, at lauren@watershedcouncil.org or (231) 347-1181 x 1109.